

## Abstract

[Abstract]

[Problem] In a vehicular rotating electrical machine apparatus mounted in an electric vehicle or a hybrid electric vehicle, a rotating electrical machine apparatus in which a rotating electrical machine and an inverter unit to control the rotating electrical machine are integrated is miniaturized, and its torque characteristic and efficiency are improved.

[Means for Resolution] Since an inverter unit 4 is cooled by cooling air forcibly formed by a cooling fan 28, the inverter unit 4 is efficiently cooled. Then, heat radiating fins 401a, 402a and 403a of heat sinks 401, 402 and 403 can be miniaturized, and consequently, the inverter unit 4 is miniaturized, and mountability of the inverter unit 4 to a rear bracket 19 is improved. Further, since the inverter unit 4 and a rotating electrical machine 2 are cooled by the cooling air formed by the cooling fan 28, the cooling medium of the inverter unit 4 is used also as the cooling medium (cooling air) of the rotating electrical machine 2, and a cooling structure is simplified.

[Selected Drawing] Fig. 1